Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims:

1. (Currently Amended) A method for detecting a data cartridge in a cartridge engaging assembly, comprising:

emitting a signal from a signal emitter on the cartridge engaging assembly into a chamber formed within the cartridge engaging assembly;

detecting at least a portion of said emitted signal when said emitted signal is reflected from the data cartridge;

generating output to indicate whether said data cartridge is present in said cartridge engaging assembly based on said emitted signal that is reflected from the data cartridge; and

deciphering a color of said data cartridge based on said emitted signal that is reflected from the data cartridge to identify ~~identifying~~ a type of said data cartridge present in said cartridge engaging assembly ~~based on said emitted signal that is reflected from the data cartridge~~.

2. (Original) The method of claim 1, wherein emitting the signal is at least during start-up.

3. (Original) The method of claim 1, wherein emitting the signal is at least during power-up of the cartridge-engaging assembly.

4. (Original) The method of claim 1, further comprising focusing said signal for detection.

5. (Currently Amended) The method of claim 1, further comprising a signal detector mounted to said cartridge engaging assembly and being used to determine when a cartridge for cleaning read/write heads is mounted in the cartridge engaging assembly.

~~further comprising deciphering a color of said data cartridge based on said emitted signal that is reflected from the data cartridge to identify.~~

6. (Currently Amended) A data cartridge detection system, comprising:

a cartridge engaging assembly for receiving a data cartridge therein;

a signal emitter mounted to said cartridge engaging assembly, said signal emitter producing a signal that is reflected by the presence of the data cartridge within said cartridge engaging assembly; and

a signal detector operatively associated with said cartridge engaging assembly, said signal detector being responsive to the reflected signal for (1) indicating that the data cartridge is present in said cartridge engaging assembly and (2) identifying a color of said data cartridge to identify a type of the data cartridge present in said cartridge engaging assembly ~~based on a surface characteristic of the data cartridge~~.

7. (Currently Amended) A data cartridge detection system, comprising:

means for receiving a data cartridge therein;

means for emitting a signal positioned on said means for receiving; and

means for detecting said signal when said signal is reflected from the data cartridge while said data cartridge is located inside said means for receiving, said means for detecting mounted to said means for receiving, wherein said means for detecting generates output to (1) indicate whether said data cartridge is present in said means for receiving based on said detected signal and (2) decipher a color of said data cartridge to identify a type of ~~interpret a bar code on~~ said data cartridge while said data cartridge is located inside said means for receiving.

8. (Original) The system of claim 7, wherein said means for emitting comprises a light source.

9. (Original) The system of claim 7, wherein said means for detecting comprises a light detector.

10. – 20. (Canceled)

21. (Previously Presented) The method of claim 1, further comprising moving the cartridge engaging assembly between first and second positions in response to the generated output indicating that the data cartridge is present in the cartridge engaging assembly.

22. (Canceled)

23. (Previously Presented) The data cartridge detection system of claim 6, further comprising a computer board on the cartridge engaging assembly, the signal emitter mounted on the computer board.

24. (Previously Presented) The data cartridge detection system of claim 6, wherein the signal detector is adapted to detect a color of the data cartridge.

25. (Canceled)